

PROJECT #010

**TREATMENT OF NON-NATIVE INVASIVE PLANTS (NNIPS) –
HEMLOCK RUN STEWARDSHIP**

SECTION B – SUPPLIES OR SERVICES AND PRICES/COSTS

Table 1. SCHEDULE OF ITEMS

Item Number/Map Label	Project Area	Site Comments	Species known to be currently on-site (treatment may overlap onto other NNIP species)	Acres	Total Price
245-029	West Branch Tionesta	Wildlife opening. Accessible via FR535, with high clearance vehicle.	Canada thistle, pigweed, crown vetch, bull thistle	22	
257-035	West Branch Tionesta	Wildlife opening. Accessible via FR114, with high clearance vehicle.	Canada thistle, pigweed, crown vetch, bull thistle, knapweed, Masticate with brushcutting equipment and do stump and/or resprout treatment: autumn olive.	21	
258-020	Duck Sherriff	Wildlife Opening. Accessible via FR114A, with high clearance vehicle.	Canada thistle, pigweed, crown vetch, bull thistle	29	
272-034	Duck Sherriff	Wildlife Opening. Accessible via FR254, which is drivable with high clearance vehicle. Opening at end of road.	Multiflora rose, honeysuckle	3	

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Item Number/Map Label	Project Area	Site Comments	Species known to be currently on-site (treatment may overlap onto other NNIP species)	Acres	Total Price
272-035	Duck Sherriff	Wildlife Opening. Large opening on East side of road. Accessible via FR254, with high clearance vehicle. Most NNIP around perimeter of opening along road corridor.	Multiflora rose, honeysuckle	11	
442-040	Morrison Run	Wildlife Opening. Accessible via SR59 to NS16867, which is drivable with high clearance vehicle.	Japanese barberry and Canada thistle in opening	4	
443-056	Morrison Run	Wildlife Opening. Accessible via FR627 and NS500007, which are drivable with high clearance vehicle.	Multiflora rose, honeysuckle, brown- ray knapweed, coltsfoot. There are areas of milkweed, monarda and blueberry to be avoided.	4	
446-033	Morrison Run	Wildlife Opening. Accessible via NS12153, which is drivable with high clearance vehicle.	Japanese barberry around perimeter of opening with sprouts in mowed areas. Japanese barberry on access road to opening also.	5	
451-028	Morrison Run	Wildlife Opening. Accessible via FR267A, which is drivable with high clearance vehicle. Access to opening is by ATV	Multiflora rose, Canada thistle, deer tongue	4	

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Item Number/Map Label	Project Area	Site Comments	Species known to be currently on-site (treatment may overlap onto other NNIP species)	Acres	Total Price
452-042	Morrison Run	Wildlife Opening. Accessible via FR177 which is drivable with high clearance vehicle.	Multiflora rose, Japanese barberry, Bull thistle	5	
454-011	Morrison Run	Wildlife Opening. Accessible via FR260, with ATV only.	Japanese barberry scattered throughout opening.	11	
455-041	Morrison Run	Wildlife Opening. Accessible via FR268, which is drivable with high clearance vehicle.	Japanese barberry especially perimeter, Multiflora rose	8	
456-018	Morrison Run	Old opening off of SR321. Accessible with ATV	Japanese barberry, Multiflora rose	3	
457-034	Upper Kinzua	Wildlife Opening. Accessible by FR142C which is drivable with high clearance vehicle.	Japanese barberry especially perimeter, Multiflora rose, narrow leave cattail	9	
458-038	Upper Kinzua	Former Wildlife opening - access road grown in off of FR142. ATV access only	Masticate with brushcutting equipment: Japanese barberry around perimeter	3	
461-020	Upper Kinzua	Create polygon along FR455B and FR455	Japanese barberry and honeysuckle along road	1	
487-023	SW Reservoir	Wildlife Opening. Accessible via FR259, then access road which is drivable with high clearance vehicle.	Japanese barberry, multiflora rose	8	

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Item Number/Map Label	Project Area	Site Comments	Species known to be currently on-site (treatment may overlap onto other NNIP species)	Acres	Total Price
487-034	SW Reservoir	Wildlife Opening. Accessible via FR492, then access road which is drivable with high clearance vehicle.	Japanese barberry, Multiflora rose	4	
494-048	SW Reservoir	Wildlife Opening. Accessible via FR110A, then access road which is drivable with high clearance vehicle. Work in this wildlife opening is limited to the time period of August 1 through January 14. No work will occur in this site outside of these dates.	Masticate with brushcutting equipment and do stump and/or resprout treatment: Japanese barberry especially perimeter, multiflora rose	6	
Total acres				161	

Bidders Notes:

1. Show-me Trip – A field trip to representative sites will be conducted, date to be determined.
2. PA 1-Call - Contractor is responsible for calling PA 1-Call (1-800-242-1776) and adhering to those procedures before work begins at a site.
3. Multiple project activities may occur in each site. See the attached, Hemlock Run Stewardship Summary Document – Wildlife and NNIPS, for a list of activities by site.

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SECTION C – DESCRIPTION / SPECIFICATION / WORK STATEMENT

DIVISION 100 - GENERAL SPECIFICATIONS

100. Scope of Contract

The intent of this contract is to conduct treatment of 161 acres of non-native invasive plants (NNIP) within the Allegheny National Forest (ANF). Treatments will be conducted and documented using protocols/forms established by the U.S. Forest Service. **The primary mode of treatment will be herbicide application.** In areas where treatment will occur less than 10 feet from standing water, manual/mechanical treatment must be used. Techniques used to accomplish treatment consist of primarily foliar application of a 2% solution aquatic labeled glyphosate product with an aquatic labeled non-ionic surfactant (for example, ChemSurf 90) and an EPA approved blue dye. If woody plants are of sufficient stem diameter and are too tall for foliar treatment (out of reach with backpack application equipment) cut stem treatment using a 50% solution of an aquatic labeled glyphosate product with an EPA approved blue dye may be used.

Contractor may use brush cutting/mulching equipment to masticate NNIP prior to herbicide application on all areas, but is required in three areas 257-35, 458-38 and 498-48. Masticate with brushcutting equipment and do stump and/or resprout treatment:

- **257-35**, two sections of autumn olive, approximately one acre total, are found along the west side of the road. The autumn olive shall be masticated prior to herbicide treatment. Current density and height of shrubs preclude adequate herbicide penetration
- **458-38**, barberry is located along the perimeter and within the opening and shall be masticated prior to herbicide treatment. Current density and height of shrubs preclude adequate herbicide penetration
- **498-48**, Barberry is also located along the perimeter and within the opening and shall be masticated prior to herbicide treatment. Current density and height of shrubs preclude adequate herbicide penetration

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Target plant species to be treated include (but not limited to): multiflora rose (*Rosa multiflora*), Japanese barberry (*Berberis thunbergii*), autumn olive (*Elaeagnus umbellata*), non-native bush honeysuckles which may include Morrow's (*Lonicera morrowii*), Amur (*Lonicera maackii*), Tartarian (*Lonicera tatarica*) – and their hybrids like Bell's (*Lonicera x bella*), however, all honeysuckles are listed as honeysuckle in the schedule of items Table 1 (all non-native invasive honeysuckles have hollow mature stems), brown ray knapweed (*Centaurea jacea*), coltsfoot (*Tussilago farfara*), pigweed (*Amaranthus sp.*), Canada thistle (*Cirsium arvense*), bull thistle (*Cirsium vulgare*) and deer-tongue grass (*Dichanthelium clandestinum*).

While effort was made to list all NNIP species known to occur at each site, there may be additional species present to treat. **Table 3. Is the Target Plant List and Treatment requirements for Plants Found within Buffer Areas.**

Areas of treatment are wildlife openings which includes a 50 foot buffer around the opening. Perimeter of treatment areas will be flagged. It is the contractor's responsibility to search for and treat target plants within designated areas. While the acres in Table 1 SCHEDULE OF ITEMS reflects the total area to be searched the amount of actual infestation of NNIP is typically far less.

100.1 Certification

The contractor shall have a representative on each site during treatment to supervise the mixing and application of herbicide, who holds a current pesticide use applicator license in the State of Pennsylvania for forest pest control and right-of-way and weeds application.

100.2 Expertise

Contractor needs to have ability and experience to operate tools/machinery for treating and the ability to identify non-native invasive plant species from surrounding vegetation so that disturbance to non-target vegetation is minimized. The contractor will furnish all materials, equipment, labor, supervision, transportation, operating supplies and incidentals necessary to safely complete work under this contract.

100.3 Applicable Documents

PROVIDED BY Forest Service

- 1. Treatment Area Maps:** Maps depicting approximate location of treatment sites (Attachment 1). For more detailed information refer to Schedule of Work Items.
- 2. Treatment Site Reporting Form:** Form to be completed by contractor for each day of treatment contractor which includes site conditions and treatment information (Attachment 2).
- 3. Contractor will notify the Forest Service of treatments daily so that the Forest Service is able to inspect treatment areas within 24 hours after herbicide application. Notification can be phone and/or email.**

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REQUIRED BY Forest Service

1. The **contractor will provide the Forest Service representative** with copies of the business and commercial (individual) pesticide applicator licenses at the prework meeting.
2. **Completed Treatment Site Reporting Forms (Attachment 2).** A signed copy by contractor will be provided to the Forest Service representative for each day of treatment within 30 calendar days of treatment (Attachment 2).
3. **Documentation of contact with PA1 Call when applicable.** If digging with powered equipment, the contractor and/or person operating the equipment must call Pennsylvania One Call System no matter what the depth, and no matter where one is in the Commonwealth of PA 3 to 10 business days in advance of digging at 1-800-242-1776 or 811. Documentation of the serial number, contacts made, clearances obtained, and any emergence contact information is required.
4. Contractor will provide the entire herbicide label and/or a copy of them from the containers used to Forest Service, label information of interest includes the EPA registration number and EPA Establishment number (factory where it was produced).

110. Location and Description

Contract activities take place on Forest Service administered lands within the Bradford Ranger District of the Allegheny National Forest.

See Contract Area Map(s).

120. Meetings

The successful vendor will be contacted prior to individual projects to discuss details of work, location, priorities, etc. The Contracting Officer (CO) and Contracting Officer Representative (COR) are authorized to give verbal orders to the contractor authorizing work to be accomplished.

130. Notification

The Contractor is required to keep the CO/COR or designated Inspector informed of their work schedule and physical location of their work force to permit ready location and timely inspection of accomplished work. The Contractor shall also notify the CO at least monthly of the progress being attained on this project. This notification can be either oral or written.

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140. Safety

It is the contractor's responsibility to ensure that the work environment is safe for themselves as well as their employees. If the Contractor feels that a requirement of this contract would place them or their employees in an unsafe environment, then work should stop on that area of work and the contractor should contact the CO/COR immediately. Work on other areas of the contract that the Contractor does not view as unsafe should continue.

Contractor is required to follow all applicable OSHA standards (CFR 29), while working on the job site. In addition, it is recommended the successful contractor utilize appropriate personal protective safety equipment, which includes, but is not limited to, hard hats, ear protection, eye protection, and hand protection while working on project items. Contractor must keep the Government representative posted as to current site work, and must be especially alert to vehicular traffic during field operations.

All sites occur within active oil and gas leases.

The contractor shall **report all accidents** or incidents associated with this contract to the Forest Service representative within 24 hours.

150. Maintenance for Traffic

Existing roads shall be kept open to all traffic by the contractor while work is progressing. Appropriate warning signs to the public will be displayed.

160. Vehicle Operation

All-Terrain Vehicles (ATV) may be operated to travel to the work sites. ATV's may not be driven on roads open to the public. The operator is subject to fines if found using ATV's in manners other than for the purpose of transporting equipment and operator to the sites. If at any time Forest Service inspections indicate that soil damage is occurring due to the use of ATV's, such use will be suspended and the damage repaired by the contractor.

In addition, it is recommended that the Contractor utilize appropriate personal protective safety equipment/clothing, which may include, but is not limited to, a hard hat, leg protection, eye protection, ear protection, and hand protection, and a DOT approved ATV helmet (if using ATV's or UTV's) while working on this contract. State ATV/OHV permit requirements also apply.

The Forest Service may, during the administration of this contract, direct the Contractor to temporarily halt treatment when: vehicles and/or equipment is causing excessive soil damage such as rutting/soil erosion on roads and/or other work areas until ground condition improve.

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170. Access

Sites may be reached by Forest Roads that are accessible by standard pickup truck during the normal working season or by ATV.

The Government assumes no obligation to plow snow or do special maintenance to keep roads open. An actual visit to the sites prior to bidding is encouraged to view the access to the project areas. The Contractor is responsible for any damage caused by their operations. Some project areas may be on a gated road. A Forest Service key will be provided as necessary to the successful bidder for access.

180. Progression of Work

181 – The Contractor is required to inform the COR or Contract Inspector of where and when work will commence.

182 – To avoid damaging sensitive or valuable resources the Contractor is required to halt operations and contact the COR or Contract Inspector and have the issue resolved on site if: the site appears inconsistent with instructions or maps, boundaries are questionable, requirements or restrictions are unreasonable, unreported water courses or wetlands are found on site, or should soils become too wet or rocky to complete the site safely and without damaging the resource(s).

190. Equipment furnished by the Contractor

Equipment and Personnel Needed:

1. All materials, equipment, labor, supervision, transportation, operating supplies and incidentals to conduct treatment.
2. Motor vehicles in proper repair and properly licensed for transportation of equipment and personal to and from treatment sites.

DIVISION 200 – TECHNICAL SPECIFICATIONS

200. Criteria: Work Requirements to be performed by the contractor

210. Prework

1. A pre-work meeting is mandatory and will be scheduled on a mutually agreed upon date, time and location.

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2. The contractor will have originals or copies of herbicide, surfactant and dye labels and material safety and data sheets (MSDS) with them during herbicide application. Contractor will provide the entire herbicide label and/or a copy of them from the containers used to Forest Service, label information of interest includes the EPA registration number and EPA Establishment number (factory where it was produced).
3. Herbicide application personnel must have easy access to emergency decontamination, first aid kits, and appropriate spill cleanup materials whenever they are using or transporting pesticides.
4. Project personnel will follow all EPA and Commonwealth approved herbicide application regulations.
5. The Forest Service must be notified at least 1 month in advance of initial herbicide treatment (for us to get pesticide use proposal approved) and at least 1 week in advance of any treatment during remainder of stewardship contract. **Contractor will notify the Forest Service of treatments daily so that the Forest Service is able to inspect treatment areas within 24 hours after herbicide application. Notification can be phone and/or email.**
6. Contractor is responsible for placement/installation of herbicide notification signs. Signs will be placed along the perimeter of treatment areas where these areas are adjacent to roads, trails, recreation areas, administrative sites, or at any other location where the public can be expected to enter the treatment area. These signs are provided by the Forest Service (see item under Government furnished property) and will state which herbicide was used, a short message about how the herbicide works and who can be contacted for more information. These signs will be posted before herbicide treatment and for at least 30 days. Signs should be 4-6 feet off-the-ground and within the line-of-sight as one would enter the area being treated. Signs may be placed on trees using staples less than ½ inch in length – no nails are to be used, if none are within close proximity metal or wooden stakes may be used. All signs and mounting materials shall be removed and disposed of in appropriate manner/location off Forest Service lands.
7. Contractor shall contact landowners adjacent to treatment areas and will be notified prior to pesticide application. Residents occupying dwellings on adjacent private land will be notified 3 to 4 weeks before spraying begins and again, if requested by a landowner, 24 hours before treatment begins. Individuals (such as loggers, woodcutters, OGM operators, contractors, berry pickers, etc.) known to be using a proposed treatment area shall be notified before treatment begins.

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220. Protection of Existing Structures

The contractor shall be required to protect existing improvements such as roads (including system, OGM woods or skid trails), pipelines, fences, gates, buildings, water bars, plantings, nesting structures, oil/gas equipment, etc., which are located in the project area. The contractor shall be required to repair or replace such improvements if damaged as a result of their operations. This includes replacing and re-seeding water bars and earthen barricades, roadside ditches, culverts and signs if disturbed as a result of this contract. Any rocks or slash removed for access must be replaced.

There are active oil leases surrounding these sites.

Cultural Resource Surveys have been conducted and there are no known cultural sites within these areas. If during the execution of this contract the operator unearths a site, work must cease in the general area and the Contract Inspector or COR notified immediately.

230. Project Area Materials Staging

Staging areas large enough for gathering, sorting, piling, etc. of removed materials prior to removal from Forest Service land are permitted in each project area. It is the Contractor's responsibility to notify the Forest Service in writing as to the desired location for each staging area. Locations will be mutually agreed upon prior to the start of operations.

240. Work Area and Equipment Clean Up

241 - The contractor shall clean up the work area in and around each contract item prior to the Government accepting the item as complete. This cleanup includes removal of all excess and discarded materials associated the project, as well as other activities of the contractor.

242 – Contractor shall ensure that prior to moving any equipment to a work site, between work sites, and from the Allegheny National Forest, all planting equipment such as but not limited to: augers, shovels, and planting bars are free of soil, seeds, vegetative matter or other debris that could contain or hold seeds. Off-road equipment used for transport of materials such as ATV's and trailers shall also be free of soil, seeds, vegetative matter or other debris that could contain or hold seeds. Equipment shall be considered free of soil, seed and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required. Cleaning of equipment may entail brushing or hosing off. The use of detergents or other cleaning agents are not to be used unless they are used at a car wash or other facility equipped for water catchment and treatment. Equipment is not be cleaned in streams, ditches or other waterways. If the contractor desires to clean the equipment on National Forest land, the contractor and Forest Service shall agree on locations for the cleaning.

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243. Contractor is responsible for calling PA-1 Call (1-800-242-1776) and adhering to those procedures before auger planting or fence building begins at a site. Contractor needs to give his or her own phone number as the call-back number when submitting information to PA-1 Call. Detailed directions to each site will be provided to the contractor prior to the start of work.

250. Treatment – Equipment

1. Heavy equipment use is prohibited within 50 feet of perennial streams and 10 feet within intermittent streams. Winching may be used to mechanically pull out plants within these buffers if needed.

260. Treatment – Plant Phenology and Growing Conditions

1. **Plant phenology:** (stage of plant growth) and weather conditions at the work site, for example snow cover, wet/impassible road conditions, will influence when treatment may begin, however, it is recommended that plants be treated early in the growing season after plant has sufficiently leaf-out and prior to seed set. Table 3 includes species specific treatment information.
2. Plants should not be herbicided **under poor growing conditions such as severe drought stress, disease or insect damage, as reduced control may result. Reduced control of target vegetation may also occur if foliage is heavily covered with dust at the time of treatment.**

270. Treatment Herbicide Use

270.1 Treatment – Buffers

1. **Buffers:** For directed foliar backpack and for cut surface (stem) application methods, the following buffers and application procedures shall be observed to provide water quality protection (USDA-FS 2007a):
 - Glyphosate shall not be applied to surface waters.
 - Glyphosate shall not be applied within 10 feet of standing (for example, a roadside ditch) or flowing water.
 - Within 10 feet of a dry intermittent stream course, dry springs, and dry seeps, only the cut surface herbicide treatment technique shall be used with glyphosate.
 - Glyphosate shall not be applied to cut stems in the stream channel.
2. Since site conditions are dependent on weather, final determination of sites where the above buffers apply will occur at the time of treatment.

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270.2 Treatment - Herbicide Application

270.21 Foliar Application

1. Use an aquatic labeled glyphosate solution (Accord, Rodeo for example) with an aquatic labeled surfactant, such as but not limited to ChemSurf 90, and add an EPA approved blue marker dye.
2. Manually applied foliar herbicides should not be applied to vegetation taller than the shoulder height of the application personnel.
3. The contractor will not apply foliar herbicides when wind exceeds 10 miles per hour in the open, or 4 miles per hour under a forest canopy measured with an anemometer.
4. To minimize the need for re-treatment, foliar herbicide application should not occur when rain, fog or dew causes moisture to drip from foliage, or when rain is anticipated within four hours at the treatment site.
5. **Foliar Application Rate:** Percent solution for foliar spraying of shrubs should be 2% percent or in such concentration as to effectively control target species, however, concentrations shall not exceed the maximum active ingredient per acre listed in Table 1 and/or labeled rates (whichever one is less). A Non-ionic surfactant must be applied with foliar treatments, per manufacturer's recommendations (generally ½ percent solution by volume).

270.22 Cut-surface (stem) Application

1. If woody plants are of sufficient stem diameter and are too tall for foliar treatment (out of reach with backpack application equipment for example) cut stem treatment using a 50% solution of an aquatic labeled glyphosate product with an EPA approved blue dye shall be used.
2. To minimize the need for retreatment, herbicide should be applied to the cut stump immediately (within 1 hour) following cutting of the stem.
3. **Cut-surface Application Rate:** glyphosate should be applied at concentrations equal to or less than 50 percent of the maximum concentration permitted by the label, and per acre rates must remain below those listed in Table 1.

270.23. Foliar and Cut-surface (stem) Typical and Maximum Rates

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Table 2: ANF Land and Resource Management Plan Typical and maximum application rates for glyphosate.

Application Type	Typical (Maximum) Rates Accord Concentrate® or Rodeo® in Quarts/Acre	Non-ionic Surfactant (80% Active ingredient) Quarts/acre
Manual – ground (backpack)	1.5 (3.0)	1.0 (2.0)
Cut surface	0.7 (1.5)	No Surfactant

270.24. Herbicide Mixing and Disposal

1. Mixing and cleaning water source should be from a domestic water supply, be transported in separate, labeled containers and the source recorded on **Treatment Site Reporting Form** (Attachment 2). Water from streams can contain enough sediment to reduce herbicide efficacy.
2. Sites selected for mixing and loading of equipment shall be located so as to prevent contaminating streams, ponds, or spring seeps. Contractor shall dispose of any excess herbicide and herbicide containers in accordance with the label. If the contractor desires to clean any equipment on National Forest land, the contractor and Forest Service shall agree on locations for the cleaning.
3. The contractor will remove all trash/litter, from the sites that is generated during performance of the contract.

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280 Treatment – No Target Plants Found

1. If no target species are found to be present when arriving at a site, the Contractor shall document the date and time that the site was visited along with a statement that no target species were present for treatment. If follow up inspections by the Forest Service show that invasive plants are present within 14 days of the date that the Contractor inspected the site, the Contractor shall be required to revisit the site for treatment.

280.1 Target NNIP List and Treatment requirements for Plants Found within Buffer Areas

Manual Treatment is required if plants are closer than 10 feet to standing water.

Table 3. Target NNIP List and Treatment requirements for Plants Found within Buffer Areas. Sorted by Common Name.

Common Name	Scientific Name	Plant Description	Pull/dig out plants leaving roots in the air to dry by placing shrub upright against a tree, rock, etc. in a single layer, the less soil contact the less likely for resprouting.	Handpull/Dig plants prior to seed development, bag and dispose of material off-site at a licensed municipal waste facility (landfill).	Documented within treatment areas to date
Autumn olive	<i>Elaeagnus umbellata</i>	deciduous shrub	X		Yes
Black knapweed	<i>Centaurea nigra</i>	herbaceous perennial		X	No
Brownray knapweed	<i>Centaurea jacea</i>	herbaceous perennial		X	Yes
Bulgle weed	<i>Ajuga reptans</i>	herbaceous perennial		X	Yes

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Common Name	Scientific Name	Plant Description	Pull/dig out plants leaving roots in the air to dry by placing shrub upright against a tree, rock, etc. in a single layer, the less soil contact the less likely for resprouting.	Handpull/Dig plants prior to seed development, bag and dispose of material off-site at a licensed municipal waste facility (landfill).	Documented within treatment areas to date
Bull thistle	<i>Cirsium vulgare</i>	herbaceous biennial		X	Yes
Canada thistle	<i>Cirsium arvense</i>	Herbaceous perennial		X	Yes
Coltsfoot	<i>Tussilago farfara</i>	herbaceous perennial		X	Yes
Crown Vetch	<i>Securigera varia</i>	herbaceous perennial		X	Yes
Deer tongue	<i>Dichanthelium clandestinum</i>	Perennial grass – native but invasive in some areas.			
Glossy buckthorn	<i>Frangula alnus</i>	deciduous shrub	X		No
Honeysuckles: Amur, Bell's, Morrow's, and Tartarian honeysuckles	<i>Lonicera maackii</i> , <i>L. X bella</i> (<i>morrowii</i> × <i>tatarica</i>), <i>L. morrowii</i> , and <i>L. tatarica</i>	deciduous shrub	X		Yes

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Common Name	Scientific Name	Plant Description	Pull/dig out plants leaving roots in the air to dry by placing shrub upright against a tree, rock, etc. in a single layer, the less soil contact the less likely for resprouting.	Handpull/Dig plants prior to seed development, bag and dispose of material off-site at a licensed municipal waste facility (landfill).	Documented within treatment areas to date
Japanese barberry	<i>Berberis thunbergii</i>	deciduous shrub	X		Yes
Japanese knotweed	<i>Fallopia japonica</i> (syn. <i>Polygonum cuspidatum</i>)	herbaceous perennial		X	No
Multiflora rose	<i>Rosa multiflora</i>	deciduous shrub	X		Yes
Narrow-leaved cattail	<i>Typha angustifolia</i>	herbaceous perennial		X	Yes
Oriental bittersweet	<i>Celastrus orbiculatus</i>	deciduous vine	X		Yes
Pigweed	<i>Amaranthus sp.</i>	annual		X	Yes
Reed canarygrass	<i>Phalaris arundinacea</i>	perennial grass		X	Yes
Spotted knapweed (formerly C. maculosa, C. beibersteinii)	<i>Centaurea stoebe ssp. micranthos</i>	herbaceous perennial		X	No
Tree of Heaven	<i>Alianthus altissima</i>	deciduous tree	X		No

280.2 Record Keeping

1. The contractor shall maintain an accurate record of herbicide used on each area, using the **Treatment Site Reporting Form** (Attachment 2). Completed forms shall be turned into the Forest Service no later than 30 calendar days following the date treatment.
2. The contractor should document unusual events that occurred during an herbicide treatment, such as unforeseen rainfall, encounters with the public, etc. on **Treatment Site Reporting Form** (Attachment 2).

290. Time of Performance

Treatment may commence when plants are visible, for most species targeted for treatment under this contract this may be as early as April 1. If surrounding herbaceous vegetation is impeding the view/ability to conduct treatment, that site may be deferred until conditions improve via mutual agreement between Contractor and the Forest Service. The period of performance for Project 010 begins after signing of contract and shall remain in effect until its termination date of **September 30, 2017**. However, once treatment begins it should be completed within that particular growing season.

300. Performance Measures

Table 4. Performance Measures.

Task	Performance Standard	Inspection/Surveillance	Acceptable Quality Level (AQL)
Invasive plant Treatment	Contractor will treat sites according to contract specifications.	<p>Forest Service will be on site during treatment at the start of the contract.</p> <p>Periodic inspections of treatment as work occurs will also take place as work progresses.</p> <p>Forest Service will inspect sites within 24 hours of treatment.</p>	<p>If less than 5% of treatment acres show no blue marker dye or evidence of manual/mechanical removal = 100% payment.</p> <p>If 5-10 % of treatment acres show no blue marker dye or evidence of manual/mechanical removal = 95% payment.</p> <p>More than 10% non-treatment, contractor will be required to rework sites within contract performance period. If rework cannot be accomplished during contract performance period payment shall be reduced by the cost per acre of the acres not treated.</p>

Attachment 2: Treatment Reporting Form – To be completed for each day of treatment.

Optional Item 1: Additional Treatment Acres

Non-native invasive plant surveys for the preparation of this contract indicated the amount of treatment acres specified within this contract. However, if by the time of contract implementation there are additional acres of treatment due to overlooking plants during surveys or there is additional plant growth/establishment, the Forest Service may exercise the option of having the contractor conduct additional acres of treatment if funds are available at the original bid rate of cost per acre within the performance period of the original contract. Treatment specifications will follow the original contract unless otherwise modified.

Optional Item 2: Retreatment

If after completion of treatments under this contract it is found that some areas require retreatment the Forest Service may exercise an option for the contractor to conduct retreatment of specified sites if funds are available at the original bid rate of cost per acre within the performance period of the original contract. Treatment specifications will follow the original contract unless otherwise modified.

SECTION G--CONTRACT ADMINISTRATION DATA

The Government will provide the following item(s) of Government property to the Contractor for use in the performance of this contract. This property shall be used and maintained by the Contractor in accordance with the provisions of the "Government Property" FAR clause contained elsewhere in the contract.

Government-Furnished Property

The Forest Service shall deliver to the Contractor, the following listed materials, supplies, property or services hereinafter referred to as Government-Furnished Property:

1. The Forest Service will provide the contractor with Forest Service **keys for road** gates. They will be furnished at the pre-work meeting to the contractor. The contractor shall return keys at the completion of the contract in person at the close-out meeting.
2. **Herbicide Notification** signs.
4. **Treatment Area Maps:** Maps depicting approximate location of treatment sites (Attachment 1).
5. **Treatment Site Reporting Form:** Form to be completed by contractor which includes site conditions and treatment information (Attachment 2).

PART III--LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS
SECTION J--LIST OF ATTACHMENTS

Project Area Name: _____

Date: _____

Contract Information

Contract Number:		PA Certified Pesticide Applicator License Number	
Contractor Name:		Expiration Date	
Address:	Contractor's Personnel on Site		
Phone Office:			
Phone Cell:			

Site Information

Temperature⁰F		Rainfall anticipated within the next 4 hours (Yes/No)	
Weather (Sun, Partly Cloudy, or Cloudy)		Rainfall within last 24 hours (Yes/No)	
Wind Speed (MPH) Required for Herbicide Treatment Open area <10mph Closed Canopy <4 mph	Record mph at site	Slope %	
Traffic Control Devices in Place (Yes/No) If no explain.		Notification Signs in Place (Yes/No) If no explain.	

Treatment Information

Treatment Type Check all that apply	Low-volume foliar	High-Volume foliar	Cut-surface (stem)
Herbicide Application Method			
Herbicide Product Name:	Herbicide Common Name (active ingredient):	Surfactant Product Name:	
Water Source Used			

Comments/remarks (include information such as encounters with people, equipment issues, unusual conditions, etc.

Contractor's Signature _____ Inspector's Signature: _____

Attachment 2: Treatment Reporting Form – To be completed for each day of treatment.

Work Items

					A	B	C	D	E	F	G
Area – Map Label	NNIP Species Treated	Estimated Amount Treated - acres	Start Time Military: HHMM	Stop Time Military HHMM	Volume of Water (Gals)	Volume of Water (Ounces)	Glyphosate (Ounces)	Total Volume Ounces (B+C+E+F)	Herbicide Percent Solution $\frac{C}{D} \times 100\%$ (D)	Surfactant (Ounces)	Surfactant Percent Solution $\frac{F}{D} \times 100\%$ (D)

Acres	Area in Square Feet	Approximate Length X Width	Approximate number of typical medium sized NNIP shrubs (6.6' x 6.6')
1	43,560	208.8' x 208.8'	1,000
0.5	21,780	147.6' x 147.6'	500
0.1	4,356	66' x 66'	100
0.01	435	20.9' x 20.9'	10
0.001	44	6.6' x 6.6'	1

Conversion Factors
1gallon = 128 ounces
1quart = 32 ounces